

DEVAL L. PATRICK
GOVERNOR

TIMOTHY P. MURRAY
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JUDYANN BIGBY, MD
SECRETARY

JOHN AUERBACH
COMMISSIONER

The Commonwealth of Massachusetts
Executive Office of Health and Human Services
Department of Public Health
William A. Hinton State Laboratory Institute
305 South Street, Jamaica Plain, MA 02130
617-983-6622

11/17/11

Evandro Carvalho
Assistant District Attorney, Suffolk County

Dear ADA Carvalho,

Enclosed are copies of the information you requested regarding sample number [REDACTED] in the following:

1. Drug Analysis Laboratory Receipt.
2. Curriculum Vitae for Daniela Frasca and Annie Khan (Dookhan).
3. Control Card with Analytical Results for sample number [REDACTED]
4. Analysis Notation Forms for the above sample number.
5. GC-MS Raw Data Sheets for the above sample number.

GC-MS confirmatory testing was performed by Annie Khan (Dookhan). All other testing was performed by Daniela Frasca. If you have any questions or concerns about these facts, please contact me at the number below.

Sincerely,

A handwritten signature in black ink, appearing to read 'Daniela Frasca'.

Daniela Frasca
Chemist II
Drug Laboratory
617 983-6631
fax: 617 983-6625

DRUG RECEIPT

CC # [REDACTED]

BOOK # 143PAGE # 102

DESTRUCTION # _____

District/Unit BK01AName & Rank of Arresting Officer LYONS / DUNFORDID# 82917 / 92258

DEFENDANT'S NAME

ADDRESS

CITY

STATE

RoxburyMa

DESCRIPTION OF ITEMS SUBMITTED

GROSS
QUANTITY

LAB USE ONLY

GROSS
WEIGHTANALYSIS
NUMBERWhite rock like substance (crack cocaine)13 plb4.65g

To be completed by ECU personnel only

Name and Rank of Submitting Officer [Signature]ID# 9370Received by ELODate 10-02-09

ECU Control # _____

Curriculum Vitae

Daniela Frasca

Education

Boston University School of Medicine, Boston MA

Currently enrolled in the Biomedical Forensic Science MS Program

Suffolk University, Boston, MA

Graduated in 05/1996 and received a Bachelor of Science in Biochemistry

EXPERIENCE

Massachusetts State Laboratory Institute/DPH, Jamaica Plain, MA 01/2001 – present

Drug Laboratory: Chemist II

- Analysis of all substances by chemical screening, microscopy, and instrument confirmation to determine the presence of drugs for law enforcement agencies in the Commonwealth of Massachusetts.
- Appointed assistant analyst on January 29, 2001 by the Assistant Commissioner of DPH
- Completed four weeks of training in drug analysis under the supervision of senior chemists.

Quest Diagnostics Incorporated, Cambridge, MA

09/1996 – 10/2001

Department of Toxicology: Medical Technologist I

- Handles comprehensive toxic analysis, therapeutic drug monitoring, forensic drug screening, and compound ID's of biohazard samples utilizing standard operating procedures in clinical toxicology.
- Entered data and interpreted results for reporting
- QC/QA of multiple analytical instrumentation as well as maintenance
- Completed 60 days of training under the supervision of doctorate level toxicologists.

Additional Training

Northeastern Association of Forensic Scientists

Designer Drugs

Clandestine labs

Agilent Instruments and Software

Digital Photography

McCrone Research Institute

Forensic Polarized Microscopy

Polarized Microscopy of Illicit Drugs and Excipients

Massachusetts State Laboratory Institute

Expert Witness

Raman Spectroscopy

Associations and Programs

- Northeastern Association of Forensic Scientists (NEAFS) 2001 - present
- The International Association of Forensic Toxicologists (TIAFT) 2003 - present
- The International Association of Therapeutic Drug Monitoring
And Clinical Toxicology (IATDMCT) 2003 - present
- Massachusetts State Science Fair Judge 2000 - present
- Middle School State Science Fair Judge 2006 - present
- Volunteer Science Project Mentor/Tutor
for the TTT Mentor Program 2003 - present

Curriculum Vitae

Annie Khan (Dookhan)

Education:

University of Massachusetts, Boston, Ma, Master of Science in Chemistry.

University of Massachusetts, Boston, Ma, Bachelor of Science in Biochemistry.

Experience:

2003 – present

Chemist I, II, Massachusetts Department of Public Health, Drug Analysis Laboratory

*Completed six-week training course conducted by senior staff within the Department of Public Health, Drug Analysis Laboratory.

*Appointed Assistant Analyst by Assistant Commissioner of Public Health, 2004.

*Responsible for the identification of illicit drugs to determine violations of harmful and narcotic drug laws.

*Trained in the use of complex analytical instrumentation, microscopes and balances for the purpose of drug analysis.

*Maintenance and repairs of all analytical instruments.

*Responsible for the Quality Control of all analytical instruments, reagents and controls/standards.

*Responsible for the Quality Control/Quality Assurance program for the drug lab.

*Notary Public.

*Qualified as an expert witness in Massachusetts Courts and U.S. District Court

2001 – 2003

QC Analyst I, II, UMMS-Massachusetts Biologic Laboratory, QC Material Control

*Completed proficiency training conducted by a member of the staff within the MLB Quality Control and Quality Assurance Department.

*Method Development for creating new techniques and enhancing vaccines for the QC Dept. and FDA.

*Writing, revising and reviewing Standard Operating Procedures (SOPs).

*Trained and supervised new chemists and interns for the department.

*Routine QC testing of products for the FDA.

*Trained in the use of complex analytical instrumentation, and balances for the purpose of QC analysis for product and validation projects.

*Calibration, preventive maintenance, QC and QA of analytical instrumentation.

*Complete testing of chemicals for Vendor Validation Project for the FDA.

*Compendial testing and interpretation of the USP, ACS, FCC, AOAC, Merck Index, PDR, etc.

Additional Training:

Dept. of Justice – Forensics Professionals. (numerous trainings)

GLP/GMP course with Massachusetts Biologic Laboratory.

QC/QA training according to FDA Codes and Regulations.

GC and GC/MS courses with Agilent Technologies and Restek.

HPLC course with Waters Cooperation.

FTIR course with Spectros.

TOC training with MBL and Sievers.

Association:

American Chemical Society (ACS)

Northeastern Association of Forensics Science (NEAFS)

No. [REDACTED]
City: Boston D.C.U. Police Dept.
Officer: P.O. Diana Lopez
Def: [REDACTED]

Date Analyzed: 05-11-10

Amount:

Subst: SUB

No. Cont: 13 Cont: pb

Date Rec'd: 10/02/2009

Gross Wt.: 4.65

No. Analyzed: 2
Net Weight: 1.87g
Estimated Net Wt of 13
Tests: 14
LIAO [initials]

Prelim: (K) Cocaine

Findings: cocaine

DRUG POWDER ANALYSIS FORM

SAMPLE #



AGENCY

Boston

ANALYST

DAB

PHYSICAL DESCRIPTION:

Ev. mark

Substance in 13 PB

2 Mary -

2 Prad -

2 Meck -

2 Cabalt - + Mard

2 Gold +

2 TLTA - + Mard

Gross wt. 3.0513g

Gross wt and Net wt of 2 randomly analyzed are on back

Estimated Net wt of 13 by 2 is 1.87g

PRELIMINARY TEST RESULTS

RESULTS

Cocaine

DATE

5/3/10

GC/MS CONFIRMATORY TEST

RESULTS

Cocaine

MS

OPERATOR

1577

DATE

5/11/10

Sample #: [REDACTED]

samples tested: 2

#	Gross Weight	Packet Weight	Net Weight	#	Gross Weight
1	0.1939	X	0.1479	26	
2	0.1766	X	0.1411	27	
3			0.2890	28	
4				29	
5				30	
6	$\div 2 = 0.1445$			31	
7				32	
8				33	
9	$\times 13 = 1.8785$			34	
10				35	
11				36	
12				37	
13				38	
14				39	
15				40	
16				41	
17				42	
18				43	
19				44	
20				45	
21				46	
22				47	
23				48	
24				49	
25				50	

Calculations:

0.1479
0.1411
0.2890

0.2890
12 =
0.1745

0.1745
13 =

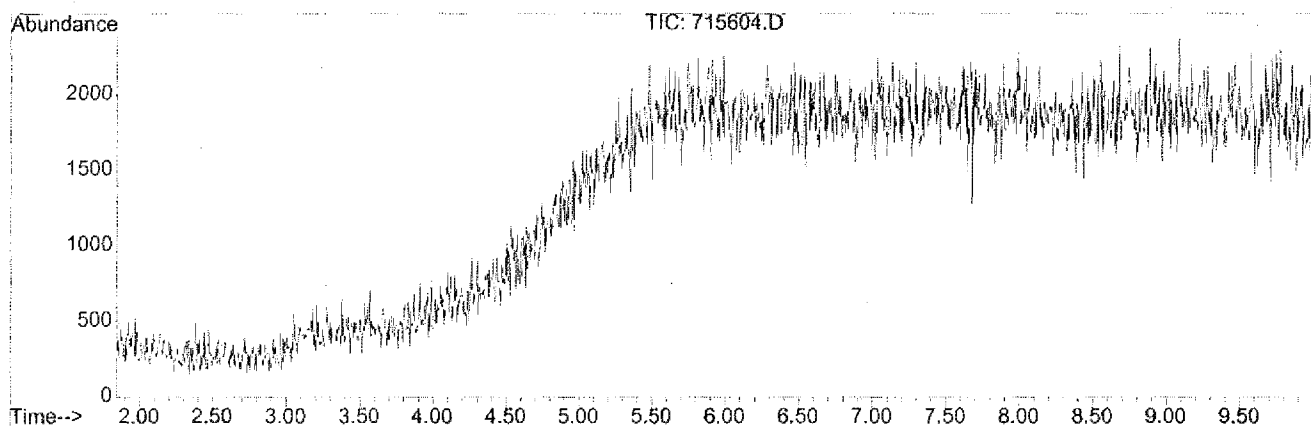
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Area Percent / Library Search Report

Information from Data File:

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Operator : ASD
Date Acquired : 10 May 2010 9:49
Sample Name : BLANK
Submitted by :
Vial Number : 1
AcquisitionMeth: DRUGS
Integrator : RTE

✓
ASD
10-14-11



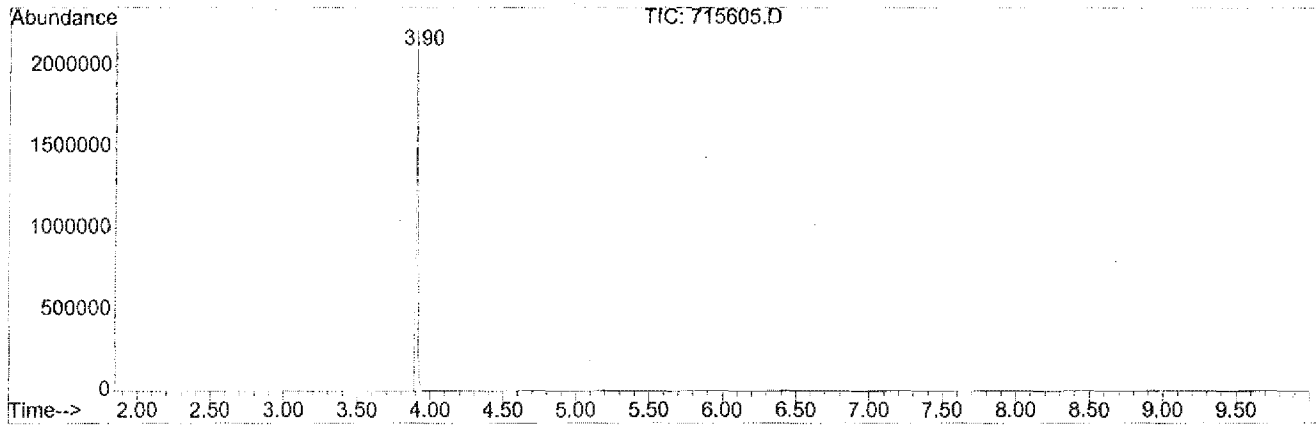
Ret. Time	Area	Area %	Ratio %
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NO INTEGRATED PEAKS

Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q2-2010\SYSTEM4\05_10_10\715605.D
Operator : ASD
Date Acquired : 10 May 2010 10:03
Sample Name : COCAINE STD
Submitted by :
Vial Number : 5
AcquisitionMeth: DRUGS
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
3.905	2064165	100.00	100.00

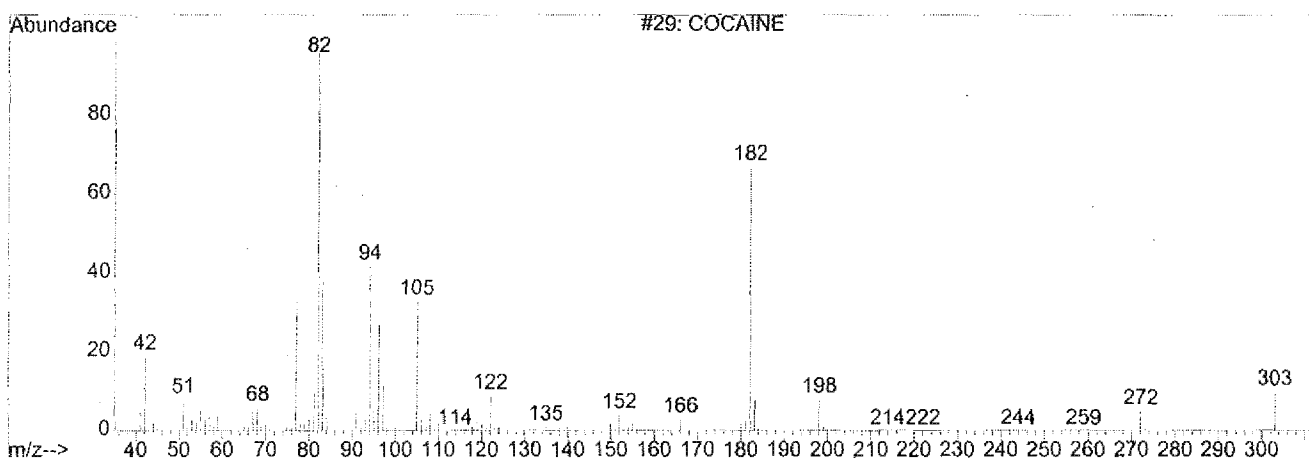
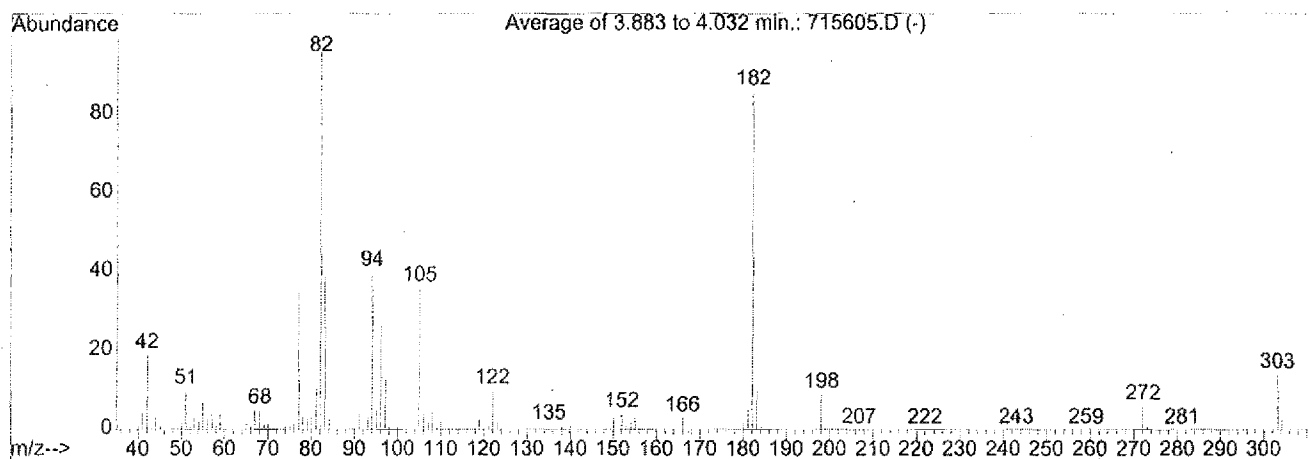
Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q2-2010\SYSTEM4\05_10_10\715605.D
 Operator : ASD
 Date Acquired : 10 May 2010 10:03
 Sample Name : COCAINE STD
 Submitted by :
 Vial Number : 5
 AcquisitionMeth: DRUGS
 Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90
 C:\DATABASE\PMW_TOX2.L Minimum Quality: 90
 C:\DATABASE\NIST98.L

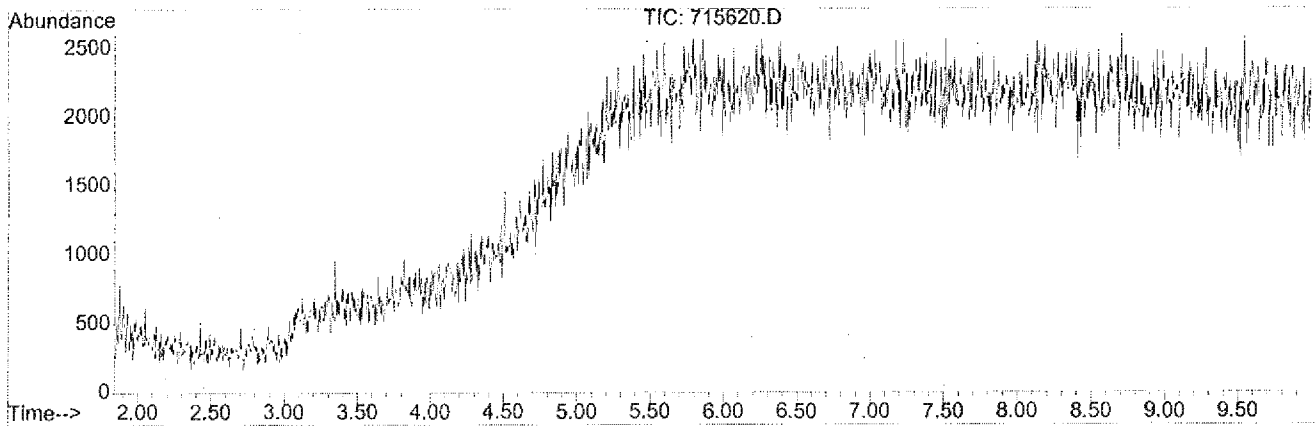
PK#	RT	Library/ID	CAS#	Qual
1	3.90	C:\DATABASE\SLI.L COCAINE	000050-36-2	99



Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q2-2010\SYSTEM4\05_10_10\715620.D
Operator : ASD
Date Acquired : 10 May 2010 13:29
Sample Name : BLANK
Submitted by : DXF
Vial Number : 1
AcquisitionMeth: DRUGS
Integrator : RTE



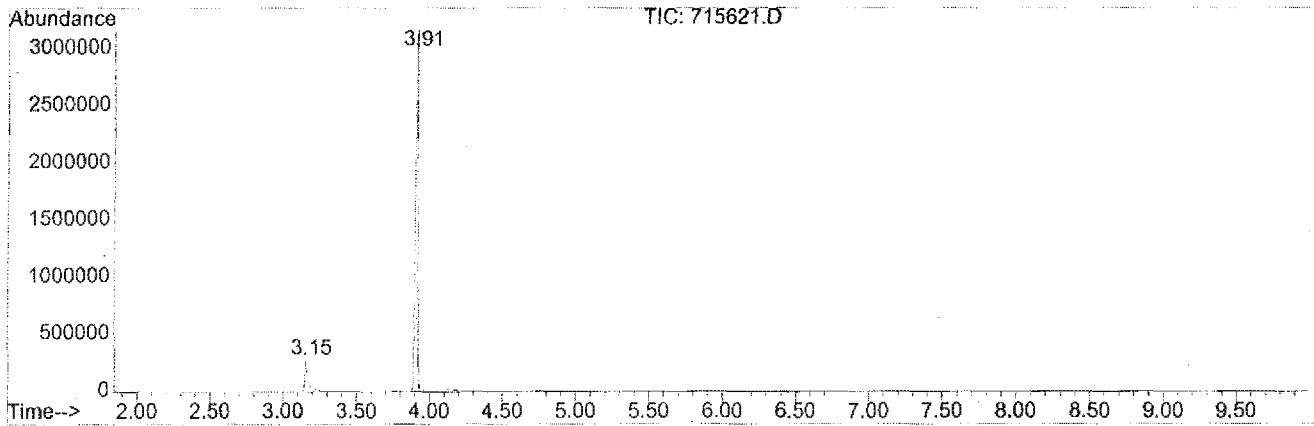
Ret. Time	Area	Area %	Ratio %
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NO INTEGRATED PEAKS

Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q2-2010\SYSTEM4\05_10_10\715621.D
 Operator : ASD
 Date Acquired : 10 May 2010 13:43
 Sample Name : XXXXXXXXXX
 Submitted by : DXF
 Vial Number : 21
 AcquisitionMeth: DRUGS
 Integrator : RTE



Ret. Time	Area	Area %	Ratio %
3.150	440640	10.49	11.72
3.912	3759268	89.51	100.00

Area Percent / Library Search Report

Information from Data File:

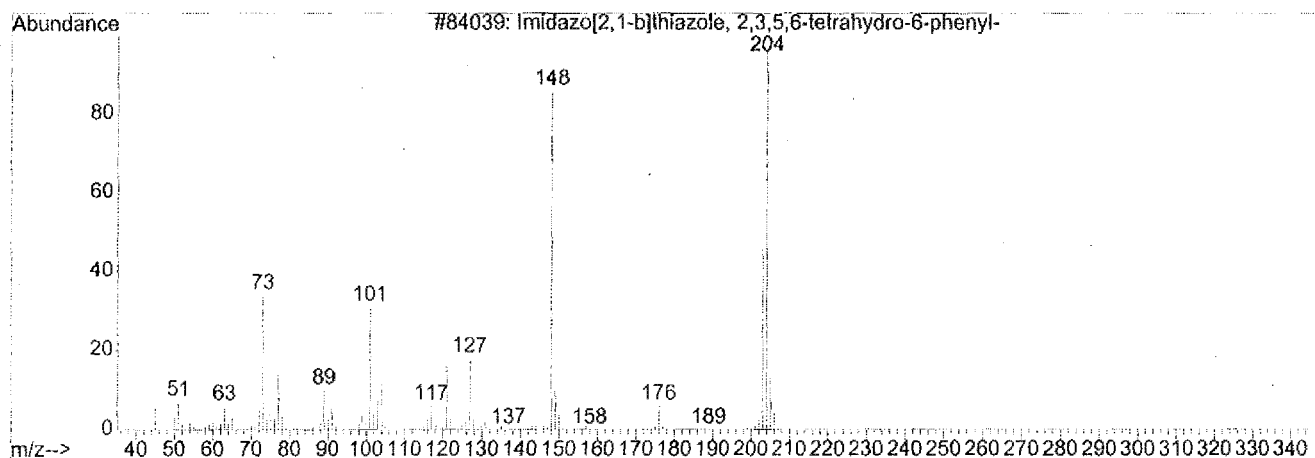
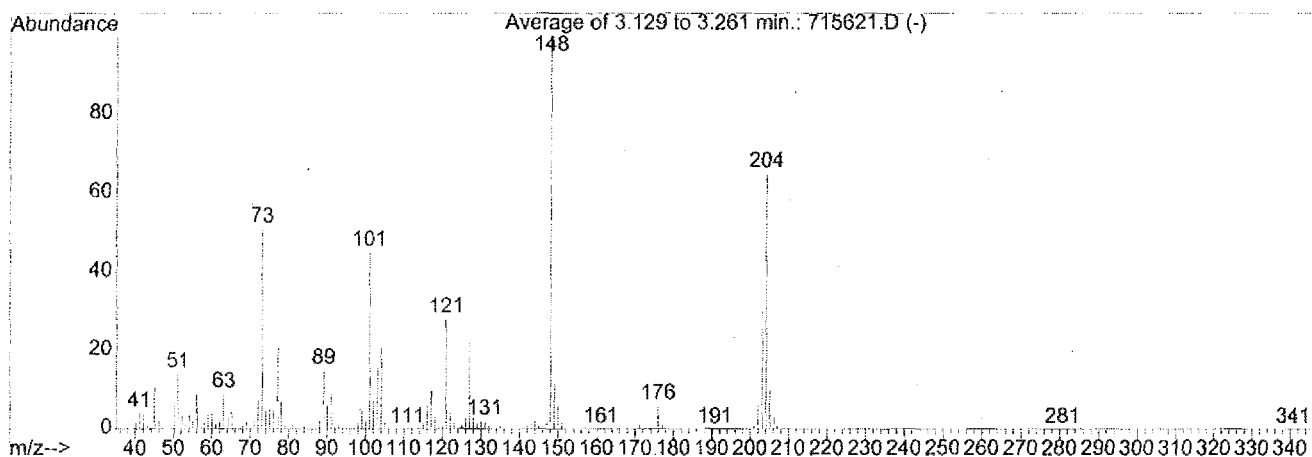
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File Name       : F:\Q2-2010\SYSTEM4\05_10_10\715621.D
Operator        : ASD
Date Acquired   : 10 May 2010   13:43
Sample Name     : ██████████
Submitted by    : DXF
Vial Number     : 21
AcquisitionMeth : DRUGS
Integrator      : RTE
  
```

```

Search Libraries: C:\DATABASE\SLI.L           Minimum Quality: 90
                  C:\DATABASE\PMW_TOX2.L      Minimum Quality: 90
                  C:\DATABASE\NIST98.L
  
```

PK#	RT	Library/ID	CAS#	Qual
1	3.15	C:\DATABASE\NIST98.L		
		Imidazo[2,1-b]thiazole, 2,3,5,6-tet	006649-23-6	98
		Imidazo[2,1-b]thiazole, 2,3,5,6-tet	006649-23-6	98
		Imidazo[2,1-b]thiazole, 2,3,5,6-tet	006649-23-6	97



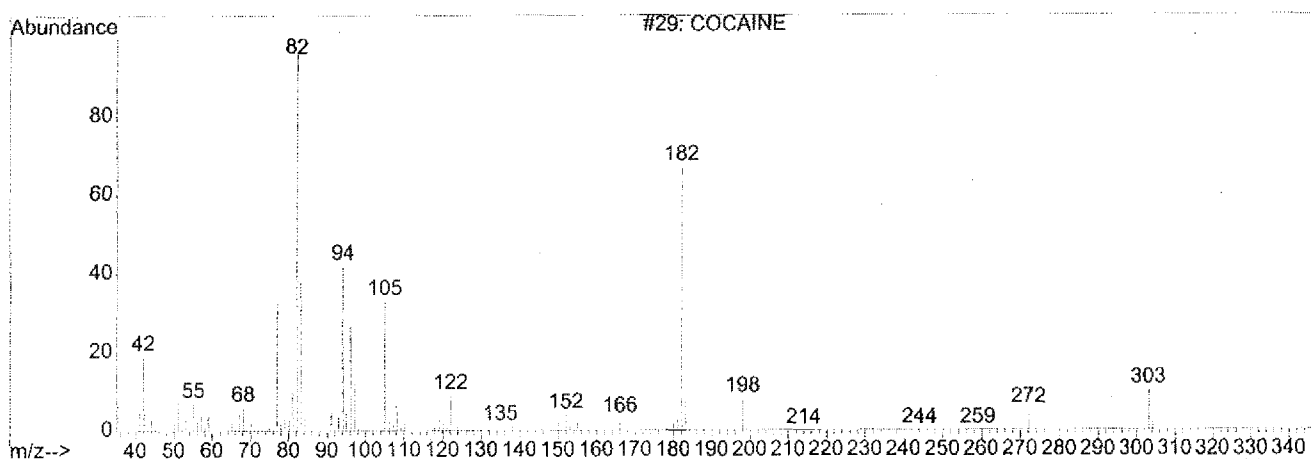
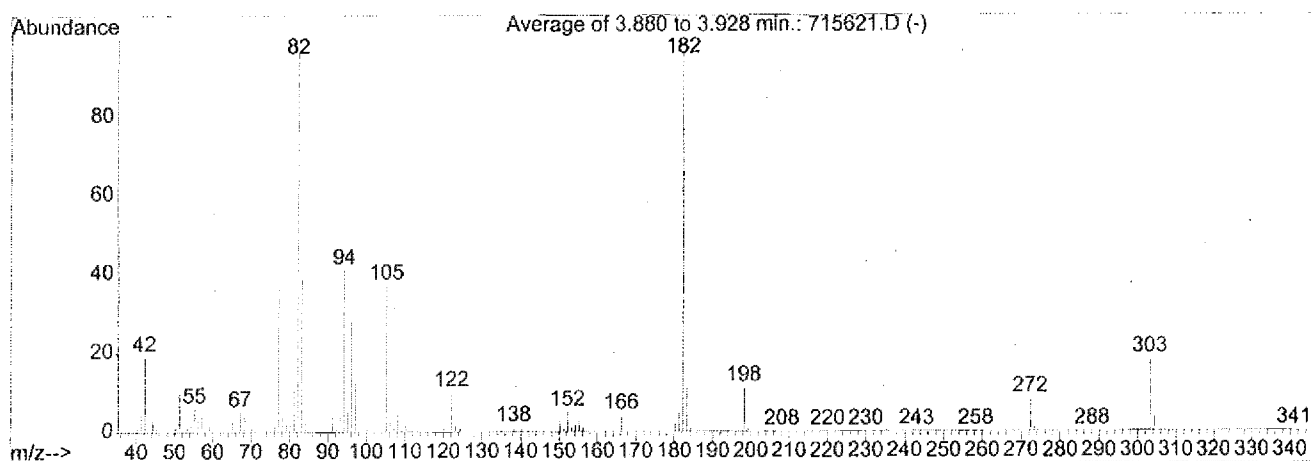
Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q2-2010\SYSTEM4\05_10_10\715621.D
 Operator : ASD
 Date Acquired : 10 May 2010 13:43
 Sample Name : XXXXXXXXXX
 Submitted by : DXF
 Vial Number : 21
 AcquisitionMeth: DRUGS
 Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90
 C:\DATABASE\PMW_TOX2.L Minimum Quality: 90
 C:\DATABASE\NIST98.L

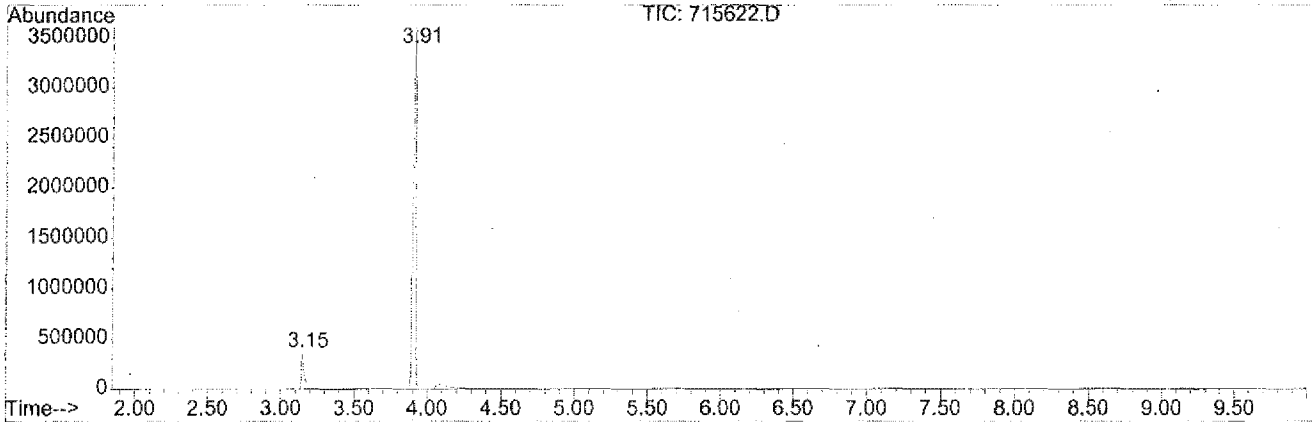
PK#	RT	Library/ID	CAS#	Qual
2	3.91	C:\DATABASE\SLI.L COCAINE	000050-36-2	99



Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q2-2010\SYSTEM4\05_10_10\715622.D
Operator : ASD
Date Acquired : 10 May 2010 13:56
Sample Name : XXXXXXXXXX
Submitted by : DXF
Vial Number : 22
AcquisitionMeth: DRUGS
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
3.147	553322	10.58	11.84
3.914	4674752	89.42	100.00

Area Percent / Library Search Report

Information from Data File:

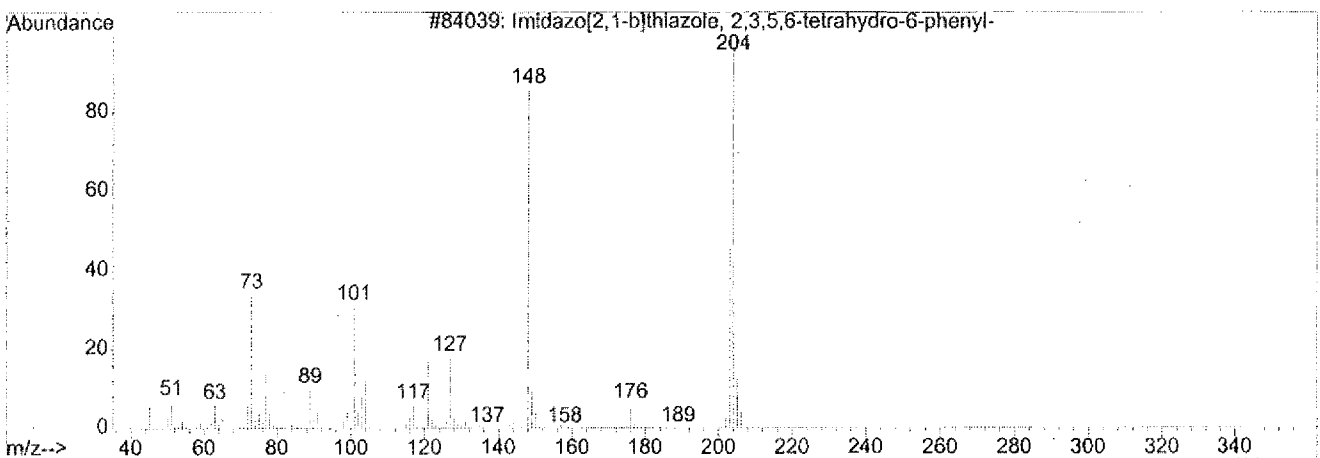
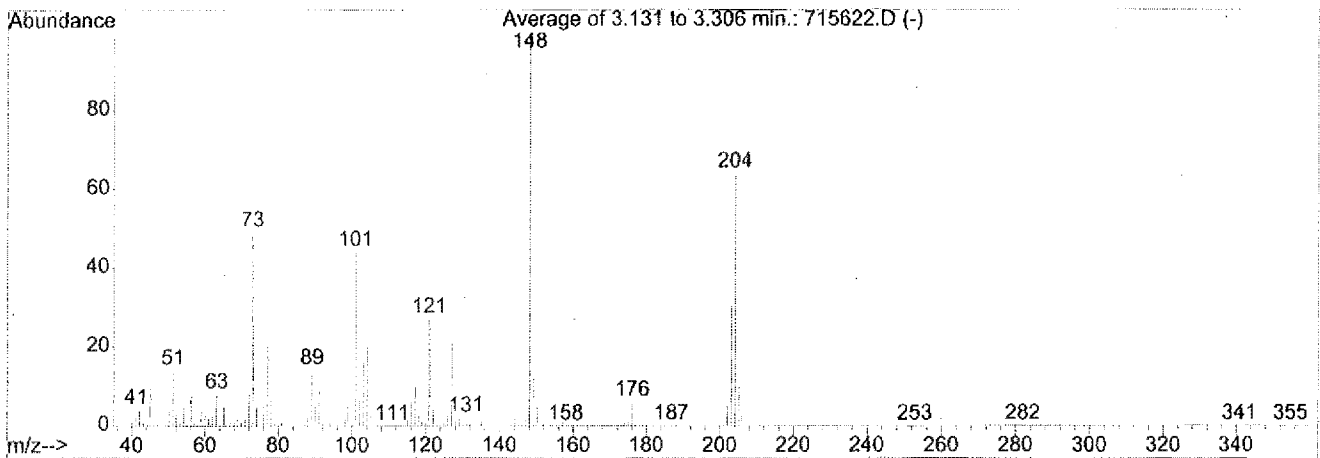
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File Name       : F:\Q2-2010\SYSTEM4\05_10_10\715622.D
Operator        : ASD
Date Acquired   : 10 May 2010  13:56
Sample Name     : 
Submitted by    : DXF
Vial Number     : 22
AcquisitionMeth : DRUGS
Integrator      : RTE
  
```

```

Search Libraries: C:\DATABASE\SLI.L           Minimum Quality: 90
                  C:\DATABASE\PMW_TOX2.L      Minimum Quality: 90
                  C:\DATABASE\NIST98.L
  
```

PK#	RT	Library/ID	CAS#	Qual
1	3.15	C:\DATABASE\NIST98.L		
		Imidazo[2,1-b]thiazole, 2,3,5,6-tet	006649-23-6	99
		Imidazo[2,1-b]thiazole, 2,3,5,6-tet	006649-23-6	99
		Imidazo[2,1-b]thiazole, 2,3,5,6-tet	006649-23-6	97



Area Percent / Library Search Report

Information from Data File:

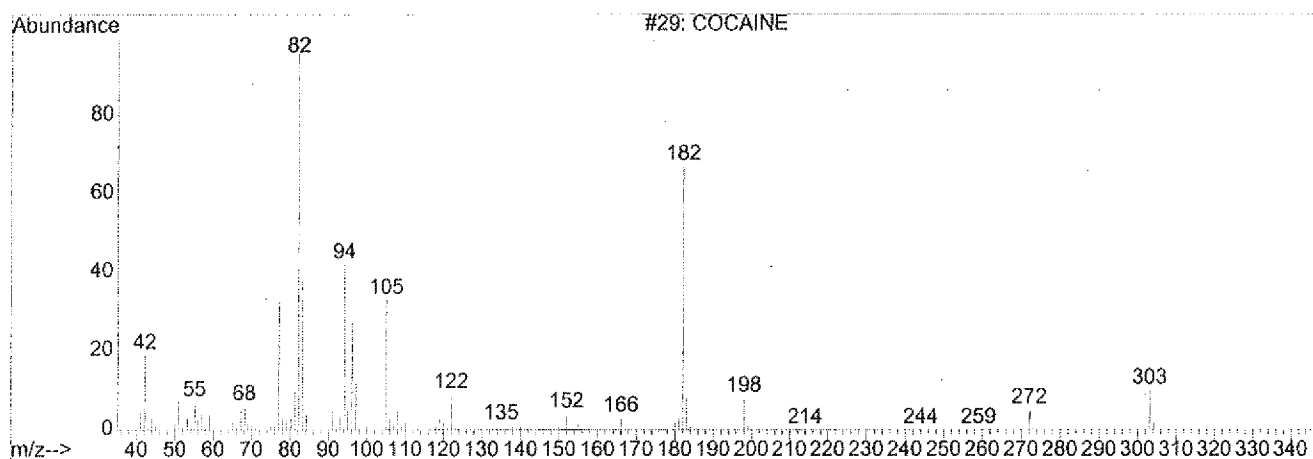
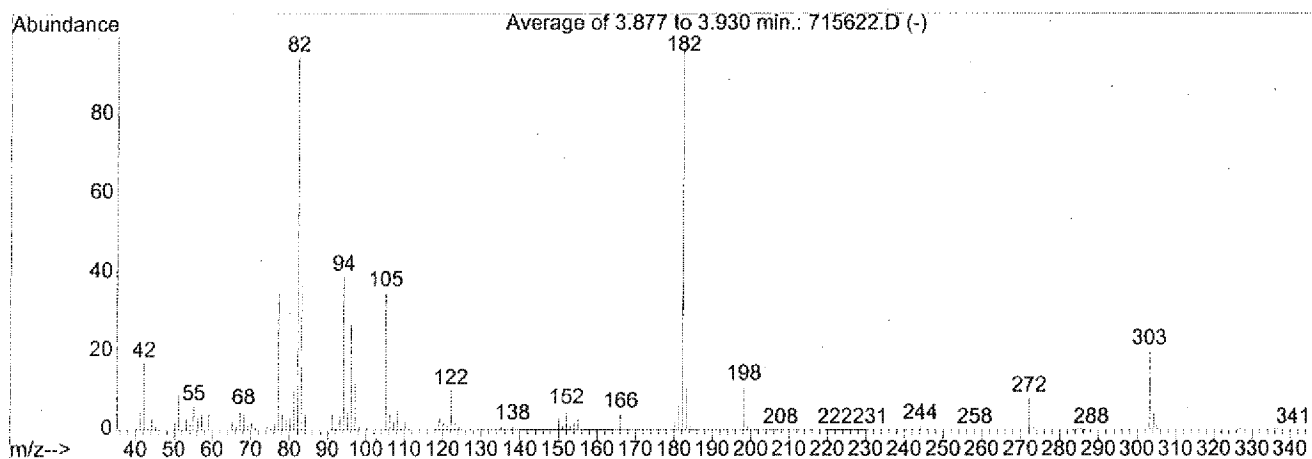
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File Name       : F:\Q2-2010\SYSTEM4\05_10_10\715622.D
Operator        : ASD
Date Acquired   : 10 May 2010   13:56
Sample Name     : ██████████
Submitted by    : DXF
Vial Number     : 22
AcquisitionMeth : DRUGS
Integrator      : RTE
  
```

```

Search Libraries: C:\DATABASE\SLI.L           Minimum Quality: 90
                  C:\DATABASE\PMW_TOX2.L      Minimum Quality: 90
                  C:\DATABASE\NIST98.L
  
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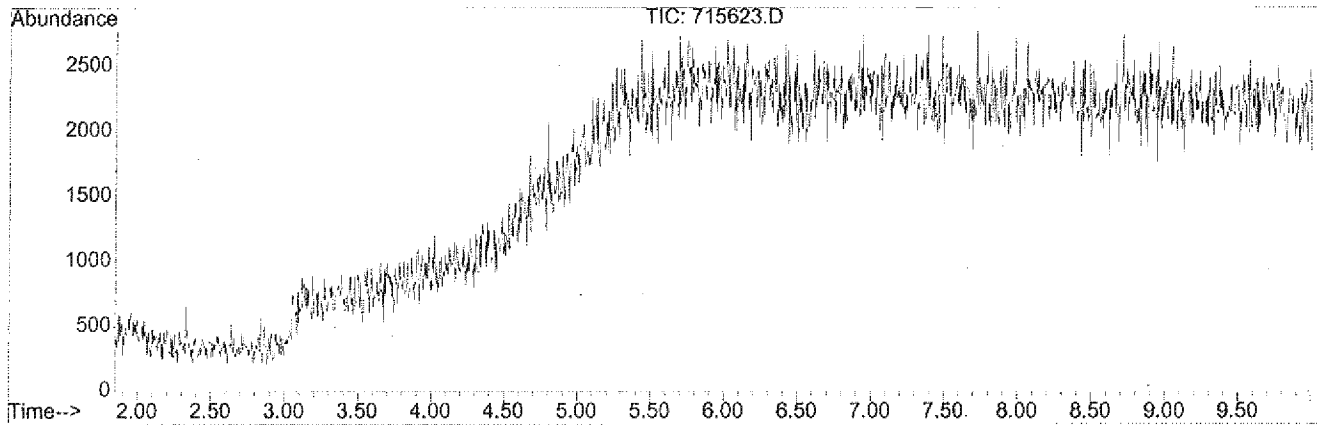
PK#	RT	Library/ID	CAS#	Qual
2	3.91	C:\DATABASE\SLI.L COCAINE	000050-36-2	99



Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q2-2010\SYSTEM4\05_10_10\715623.D
Operator : ASD
Date Acquired : 10 May 2010 14:10
Sample Name : BLANK
Submitted by : CBS
Vial Number : 1
AcquisitionMeth: DRUGS
Integrator : RTE



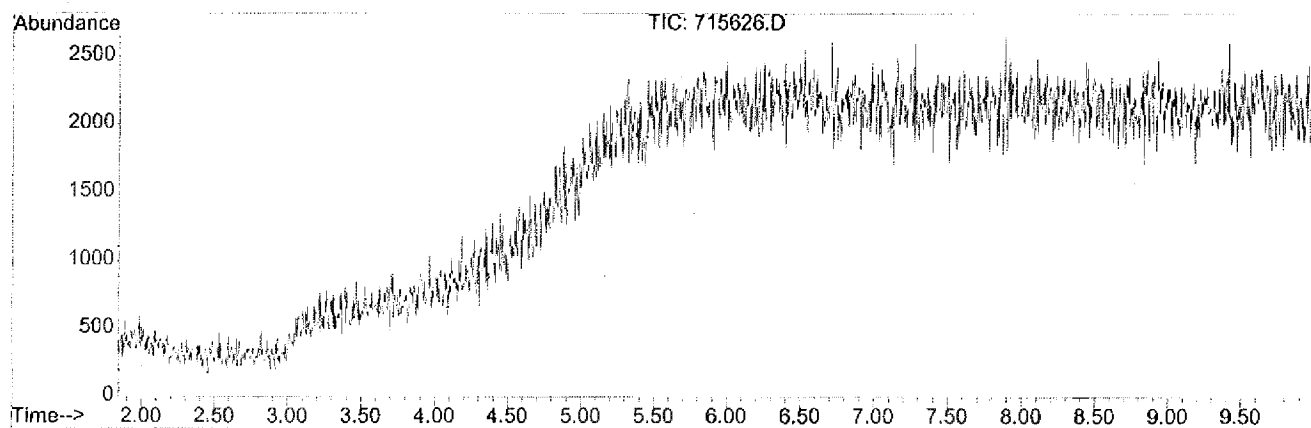
Ret. Time	Area	Area %	Ratio %
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NO INTEGRATED PEAKS

Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q2-2010\SYSTEM4\05_10_10\715626.D
Operator : ASD
Date Acquired : 10 May 2010 14:51
Sample Name : BLANK
Submitted by :
Vial Number : 1
AcquisitionMeth: DRUGS
Integrator : RTE



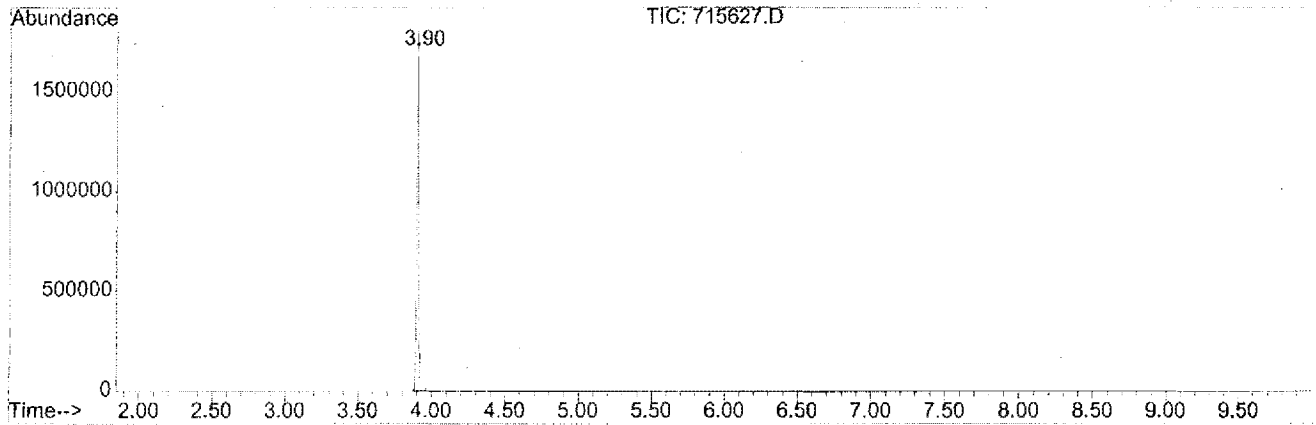
Ret. Time	Area	Area %	Ratio %
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NO INTEGRATED PEAKS

Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q2-2010\SYSTEM4\05_10_10\715627.D
Operator : ASD
Date Acquired : 10 May 2010 15:05
Sample Name : COCAINE STD
Submitted by :
Vial Number : 27
AcquisitionMeth: DRUGS
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
3.901	1583532	100.00	100.00

Area Percent / Library Search Report

Information from Data File:

```

File Name       : F:\Q2-2010\SYSTEM4\05_10_10\715627.D
Operator        : ASD
Date Acquired   : 10 May 2010 15:05
Sample Name     : COCAINE STD
Submitted by    :
Vial Number     : 27
AcquisitionMeth : DRUGS
Integrator      : RTE
  
```

```

Search Libraries: C:\DATABASE\SLI.L           Minimum Quality: 90
                  C:\DATABASE\PMW_TOX2.L      Minimum Quality: 90
                  C:\DATABASE\NIST98.L
  
```

PK#	RT	Library/ID	CAS#	Qual
1	3.90	C:\DATABASE\SLI.L COCAINE	000050-36-2	99

